

4th Grade Science

Standard 1: The Nature of Science – Supporting Evidence

Multiple factors affect the outcome of an experiment					
No Evidence	Initiates an action to get a desired effect	Demonstrates a understanding of cause and effect	Applies knowledge of cause and effect to new situations	Explains how different factors affect different outcomes	Applies knowledge that different factors affect different outcomes

Standard 2: The Nature of Technology – Engineering and Society

Tools are functional for daily living					
No Evidence	Identifies common tools	Matches common tools to purpose	Identifies common tools and uses tools for intended purpose	Uses and identifies function of tools for the intended purpose	Generalizes use of tools across settings

Standard 3: Physical Science - Properties of Matter

Matter takes up space and has mass whether in whole or parts					
No Evidence	Identify the presence of objects in environment	Identify the parts of an object	Differentiates a part from the whole	Generates examples of matter being made of mass where the total parts make a whole	Evaluates different sets of objects with different parts and same mass

Physical Science - Changes in Matter

Science involves observation and experimentation of changes occurring in matter					
No Evidence	Recognizes when something has changed	Recognizes when matter has changed	Identify forms of matter that have undergone changes	Identifies forms of matter that have undergone irreversible changes	Explains charts and graphs of irreversible changes

Physical Science - Energy

Heat is a form of energy produced from different sources and methods					
No Evidence	Recognize when something is hot or cold	Identifies sources of heat	Explains one example of how heat is produced	Generates examples of methods to produce heat	Describes different ways that heat energy is produced

Standard 4: Earth and Space Science – Earth Systems

The day/night cycle is a repetitive pattern					
No Evidence	Recognizes day and night	Recognizes the difference between day and night	Recognizes a pattern of day and night	Identifies the repetitive 24 hour cycle	Produces representations to explain the 24 hour cycle

Earth and Space Science – Earth Structures

Wind, heat, water, and ice reshape the earth's surface					
No Evidence	Responds to wind, heat, water or ice	Identifies wind, heat, water, and ice	Identifies wind, heat, water and ice in the environment	Identifies wind, heat, water and ice changes to the earth's surface	Provides examples of changes in earth's surface due to wind, heat, water and ice

Standard 5: Life Science - Life Energy

Energy is needed for plants and animals to live					
No Evidence	Recognizes where food is kept	Identifies various food sources	Applies knowledge of food sources	Differentiates energy sources for plants and animals	Describes how energy sources are different for plants and animals